

CLAIMS

1. Equipment for mechanical machining, especially for turning and drilling mechanical workpieces (2), such as light alloy wheels and the like, characterized in that it comprises:

- 5 - at least one turning unit(3) with a double chuck (6, 7) to support the workpieces being machined and a turning head (8) designed to work alternately in association with one or other of the said chucks (6, 7),
- at least one first workpiece loading/unloading device (11) for moving the workpieces being machined to one or other of the said chucks (6, 7) so that
10 workpieces are loaded/unloaded from one of the chucks at the same time as mechanical machining is being performed on the other chuck,
- at least one drilling unit (4) operatively associated with the turning unit (3) and including at least one first drilling head (21) combined with at least one corresponding first workpiece-holding means (19),
- 15 - at least one second workpiece loading/unloading device (23) for moving workpieces being machined in the said at least one drilling unit (4),
- the said first and second devices (11, 23) being further incorporated into the said equipment to move the workpieces undergoing machining towards and away from one or other of the said turning (3) and drilling (4) units so that
20 mechanical machining in the drilling and turning units takes place at the same time as the operations of loading and unloading workpieces onto and from the equipment.

2. Equipment according to claim 1, comprising in the said drilling unit (4) at least one second drilling head (22) and at least one second workpiece-holding
25 means (20), the said first and second drilling head (21, 22) being incorporated into the drilling unit (4) in such a way as to carry out corresponding separate drilling operations in one working cycle on a workpiece supported on one of

the said workpiece-holding means (19, 20) while at the same time workpiece loading/unloading movements are being performed in relation to the other workpiece-holding means.

3. Equipment according to claim 2, in which the said drilling heads(21, 22) are
5 equipped with corresponding tool magazines so that during stages in which machining is carried out by one of the heads the other head is at the same time being fitted with tools to carry out subsequent drilling operations.

4. Equipment according to one or more of the preceding claims, in which guide
10 means are provided for the said at least one drilling head (21, 22) along three corresponding controlled working axes.

5. Equipment according to one or more of the preceding claims, in which the
said at least one turning head (8) comprises a corresponding tool-holding slide
(10) guided so as to move away from and towards the said chucks (6, 7) for
alternate machining at one or other of the chucks.

15 6. Equipment according to one or more of the preceding claims, in which the
said first and second workpiece loading/unloading devices (11, 23) are guided
along the said turning (3) and drilling (4) units between a magazine (12) from
which workpieces are picked up for machining and an opposite station (13) for
unloading workpieces machined in the equipment.

20 7. Equipment according to claim 6, in which the said workpiece
loading/unloading devices (11, 23) are conducted along a guide (15)
supported by vertical uprights (14) and lying above turning (3) and drilling (4)
units for moving the workpieces being machined from and towards the said
drilling and turning units between the said magazine (12) from which the
25 workpieces are picked up and the said station (13) at which the workpieces
are unloaded from the equipment.